Key Assignments and Assessments
BVSD Common Assessments: CSAP

Boulder Valley School District
Course Syllabus

Teacher and student designed assessments: Content Test, Design Projects, Engineering projects.

Course: Geometry Advanced

Teacher: Tara Calloway, rm 297

Course Description
Mathematics at the Geometry level focuses on geometric proofs, properties of polygons, congruence, similarity, parallelism, perpendicularity, the Pythagorean theorem, trigonometric ratios, and the relationships of circles, spheres, lines, and planes with respect to space and to the plane. Problem solving, representations, reasoning, communication, and connections within and outside of mathematics underline all of the teaching and learning at the Geometry level. The course is designed for highly motivated and mathematically talented students.

Office Hours:
Office Hours: Planning Period 12:53 – 1:42
Available after school by appointment
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Enduring Understandings

- An object in a plane or in space can be oriented in an infinite number of ways while maintaining its size or shape.
- The location of an object on a plane or in space can be described quantitatively.
- Two dimensional objects can be described, classified, and analyzed by their attributes.
- The location of an object on a plane or in space can be described quantitatively.
- Linear measure, area, and volume are fundamentally different but may be related to one another in ways that permit calculation of one given the other.
- Mathematics is built on reason and always makes Sense.
- Mathematics can be used to solve problems outside of the mathematics classroom.
- Reasoning allows us to make conjectures and to prove conjectures.
- Precise language helps us express mathematical ideas and receive them.

Essential Questions

• How can transformations be described mathematically?
• How can space be defined through numbers/measurement?
• Why do we compare, contrast and classify objects?
• How do decomposing and recomposing shapes help us build our understanding of mathematics?
• How do you know when you have proven something?
• What does it take to verify a conjecture? How do you develop a convincing argument?

Grading Policy*
Summative Assessments: 70%
Formative and Practice, Preparation and participation: 30%

Retakes of summative assessments are allowed within a specific time period after the first assessment. Assessment corrections and all formative and homework assignments for that unit must be completed before retaking a summative assessment.

***Grading Policy – This grading policy reflects Board Policy IKA-R**

Textbooks and Supplementary Materials

Geometry McDougal Littell

Scientific Calculator

Essential Learnings

- Applies congruence and similarity correspondences and properties of the figures to find missing parts of geometric figures and provide logical justification
- Uses algebraic, coordinate, and deductive methods to solve problems involving parallel and perpendicular lines and distance and midpoint formulas
- Investigates and indentifies properties of polygons and circles
- Solves practical problems involving right triangles by using the Pythagorean Theorem, properties of special right triangles, and right triangle trigonometry
- Uses formulas to solve practical problems involving perimeter, area, surface area, and volume and use appropriate units of measurement
- Construct and judge the validity of a logical argument consisting of a set of premises and a Conclusion